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Photos on the front cover were taken along various segments of Interstate 5 in Caltrans District 6

Transportation Concept Report

Office of System Planning **July 2005**

INTERSTATE CALIFORNIA 5

District 6

Approval Recommended:

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D. Alan McCuen **Date**
Deputy District Director
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District Director

Table of Contents

Transportation Concept Report
Interstate 5
July 2005

I. INTRODUCTION

The Transportation Concept Report (TCR) is a long-range system planning document that establishes a planning concept for the corridor through the year 2030. TCRs provides route data and information, as well as current and projected (2005, 2015, and 2030) operating characteristics.

Considering reasonable financial and physical constraints, the TCR defines the appropriate Concept Level of Service (Concept LOS) and facility types for each route.

It also broadly identifies the nature and extent of improvements needed to attain the Concept LOS. Capacity-enhancing improvements, such as lane additions, are the primary focus for LOS attainment.

Caltrans endeavors to maintain a target LOS at the transition between LOS C and LOS D on State highways/interstate facilities, or whichever LOS is feasible to attain.

For the purpose of this document, however, the Concept LOS is a “target” LOS determined by the importance of the route and environmental factors. A deficiency (a need for improvement) is triggered when the actual LOS falls below the Concept LOS.

The TCR also identifies transit, bicycle travel, and the implementation of Intelligent Transportation Systems (ITS) as integral to route corridor development.

The Ultimate Transportation Corridor (UTC) ensures that adequate right-of-way (ROW) is preserved for ultimate facility projects beyond 2030. However, the determination of the UTC does not consider funding as a constraint. Caltrans District 6 System Planning staff should be consulted for the interim ROW (prior to ultimate construction) for a specific location along the corridor.

This document identifies the initial and conceptual planning phase that leads to subsequent programming and the project development process.

Consequently, the specific nature of proposed improvements such as roadway width, number of lanes, and access control might change in later project development stages. Final determinations are normally made during later project report and design phases.

Therefore, the TCR is a “living document,” subject to amendments as conditions change and projects are completed. System Planning staff will update the TCR on a three-to-five year cycle or as needed.

This TCR for Interstate 5 was prepared and completed by the District 6 Office of System Planning staff in cooperation with local and regional agencies and other Caltrans functional units. As such, it will serve as a guide in cooperative planning and implementation of transportation and land use decisions.

II. ROUTE DESCRIPTION AND PURPOSE

Begins: At the USA/Mexico International Boundary (California/Baja California)

Ends: At USA/Canada International Boundary (Washington/British Columbia)

Length: A 796 mile freeway running the entire length of California; 308 miles through Oregon, and 277 miles through Washington, for a total of 1,381 miles.

This TCR covers the 180 miles of I-5 within Caltrans District 6, from the Los Angeles County Line south of Lebec to the Merced County Line in northwest Fresno County. Route 5 is one of two major north-south routes linking the Central Valley with Northern and Southern California. Within Caltrans District 6, the Interstate is entirely a multi-lane freeway, traversing Kern, Kings, and Fresno Counties.

Interstate highways are considered the backbone of the State of California's transportation system. Route 5 is a vital gateway into the Central Valley for goods movement and for the interstate and international transport for North American trade. It is also a High Emphasis Focus Route, providing connectivity with the Gateway/Focus routes SR 99 and 58, which in turn provide access to the Central Valley and destinations beyond.

Twelve State Highways intersect the route through District 6. From south to north, the highways are Routes 99, 166, 223, 119, 43, 58, 46, 41, 269, 198, 145, and 33.

Land Use: Route 5 lies in the western San Joaquin Valley, dividing the Coastal Range foothills from the agricultural lands to the east. In District 6, agricultural land use dominates the corridor and the route is classified as rural; there are no major residential, commercial, or industrial uses.

Geared primarily to travelers, there are limited commercial developments situated at various interchanges along I-5.

However, there are limited commercial developments situated at various interchanges along the route. Geared primarily to travelers, most of these businesses consist of fast food restaurants, gas stations, and motels.

Terrain: The southern portion of Kern County is mountainous from the Los Angeles County line northerly to just before the Grapevine commercial area, post mile (PM) 0.0 to PM 10.4. The balance of the route through Kern, Kings, and Fresno counties consists of flat terrain.

A. Modal Alternatives

Transit Services: Both fixed-route and dial-a-ride buses serve the local traveler as summarized below. For an overview, see the Transit Services chart in the Appendix. For specific trip information, contact the transit provider.

Kern County: Transit carriers include Kern Regional Transit (KRT), Golden Empire Transit (GET), Greyhound Bus Lines, Orange Belt Stages, Amtrak (north from Bakersfield) and Amtrak Connection (Amtrak's continuing bus service to locations in Southern California).

Kings County: Transit carriers in the I-5 corridor include Kings Area Rural Transit (KART), Orange Belt Stages, Greyhound Bus Lines, and Amtrak.

Fresno County: Transit carriers include the Fresno County Regional Transit Agency (FCRTA), Orange Belt Stages, and Greyhound Bus Lines, and Amtrak.

Amtrak Rail: There are currently six Amtrak passenger rail trains that traverse District 6 on a daily basis on the San Joaquin Route, with connections in Bakersfield, Wasco, Corcoran, Hanford, Fresno, and Madera.

High Speed Rail: The California High Speed Rail Authority (CHSRA) has developed a plan to build a high-speed rail line from San Diego to San Francisco. Electric-powered, high-speed trains could be operated at speeds up to 200 mph, allowing for travel from downtown San Francisco to Los Angeles in approximately 2 1/2 hours. The proposed 700-mile-long system would stretch from San Francisco, Oakland, and Sacramento in the north, through the Central Valley, to Los Angeles and San Diego in the south.

Should the CHSRA choose the Grapevine route alignment (over the Palmdale/Lancaster/Tehachapi route), it may parallel I-5 and SR 99. The high-speed rail line would connect to the State's existing transportation network with station links to airports, intercity rail and bus lines, commuter rail, and urban rail transit lines. This will directly benefit all motorists with traffic reductions and will help improve travel times.

Bicycle routes/pedestrian access: As with most freeways, the route's controlled access ROW prohibits pedestrians. Within District 6, all of I-5 is open to bicycle travel. The terrain ranges from level to rolling, with the exception of the Grapevine segment (from PM 5.02 to PM 10.3) which has a 5-6 percent grade.

Shoulders on the entire length are 10 feet wide and well maintained. Traveler facilities and amenities, such as food, water, lodging, etc., occur sparsely so bicyclists should plan ahead for their trip. For a more detailed description of the bike facilities along this route, please see the Appendix.

B. Intelligent Transportation Systems

Numerous applications of ITS exist on I-5 and new measures are proposed throughout Interstate 5. Examples of existing ITS applications along the route are: closed circuit television, changeable message signs, highway advisory radio, traffic monitoring stations, and weather stations. In addition, the Kern Council of Governments, through the creation of the Kern Motorist Aid Authority, operates and maintains a motorist aid call box system along I-5 in Kern County.

The Transportation Management Center, located at the District Office in Fresno, dispatches Caltrans vehicles with portable changeable message signs to improve safety and traffic flow.

A new aid to travelers, the 511 travel information phone number system, is being implemented throughout various areas of the country and in the State. The new 511 call system is a three-digit phone number with access to travel information. Not yet available in District 6, the 511 number would be an easy to remember telephone number that can be accessed by travelers before and during their trip to obtain information about State highways, local roads, local transit, and State and local trains.

The Caltrans Central Valley Transportation Management Center (TMC) monitors specific traffic locations from its headquarters at the District Office in Fresno using ITS measures such as closed circuit television and changeable message signs.

Implementation of various ITS technology will help enhance traveler information service and operational and safety efficiency of the route by informing motorists of traffic congestion and inclement weather such as fog, dust, wind, highway construction and/or closings. A chart in the Appendix lists existing and proposed ITS measures along I-5.

C. Interstate 5 Highway Facts

* Interstate 5 route approved in 1947 via SR 99; relocated to the current location as the West Side Freeway in 1957.

* Formerly known as Routes 4 and 238, which were added to the State Highway System in 1909 and 1957, respectively.

* Became part of the California Freeway and Expressway System in 1959.

* A major route in the most productive agricultural region in the world, I-5 is critical to the economic vitality of the State for goods movement and interregional travelers.

* Used for goods movement and by interregional travelers, the Annual Average Daily Traffic (AADT) ranges from 28,000 to 61,000, with trucks constituting up to 31 percent of the AADT.

* Designated as a Lifeline Route (Earthquake Emergency Response).

* Designated as a High Emphasis, Focus, and Gateway route on the Interregional Road System (IRRS).

* Recognized as a Transportation Gateway of Major Statewide Significance.

* Identified as a "Priority Global Gateway" for goods movement in the Caltrans Global Gateways Development Program (January 2002).

* Under the Federal-aid Surface Transportation Program, part of the National Highway System as a Strategic Highway Corridor Route (STRAHNET).

* On the National Network for STAA trucks.

* Functionally classified as a Principal Arterial.

* Identified as an Intermodal Corridor of Economic Significance (ICES).

* Designated as a Blue Star Memorial Highway in dedication to the United States armed forces.

* The mountainous area is known as the Grapevine.

D. General Environmental Considerations

Sensitive biological species along the I-5 corridor include various flora and fauna. The flora include the Kern mallow, San Joaquin woolly threads, California jewel-flower, and wetlands area flora.

The fauna include the burrowing owl, migratory birds, fairy shrimp, vernal pool tadpole shrimp, giant kangaroo rat, San Joaquin antelope squirrel, San Joaquin kit fox, Tipton kangaroo rats, the California and Yuma myotis bats, the big brown and Mexican free tail bats, Swainson's hawk and blunt-nosed leopard lizards.

Sensitive biological species along the I-5 corridor include Swainson's Hawk.

Cultural and archaeological sites are located along the corridor in unspecified areas. These sites are monitored by Caltrans staff archaeologists and Native American consultants, and are protected by State law.

III. Segment Map

Attached on the following pages is an 11x17" foldout TCR Segment Map for Route 5. This map shows the 16 segments of I-5 in Kern, Kings, and Fresno Counties.

In Section IV is an overview of Interstate 5 geometrics, land use, and general environmental considerations. The overview is split into several segment groups. See the attached four page Summary Chart in Section VI for additional information in table form.

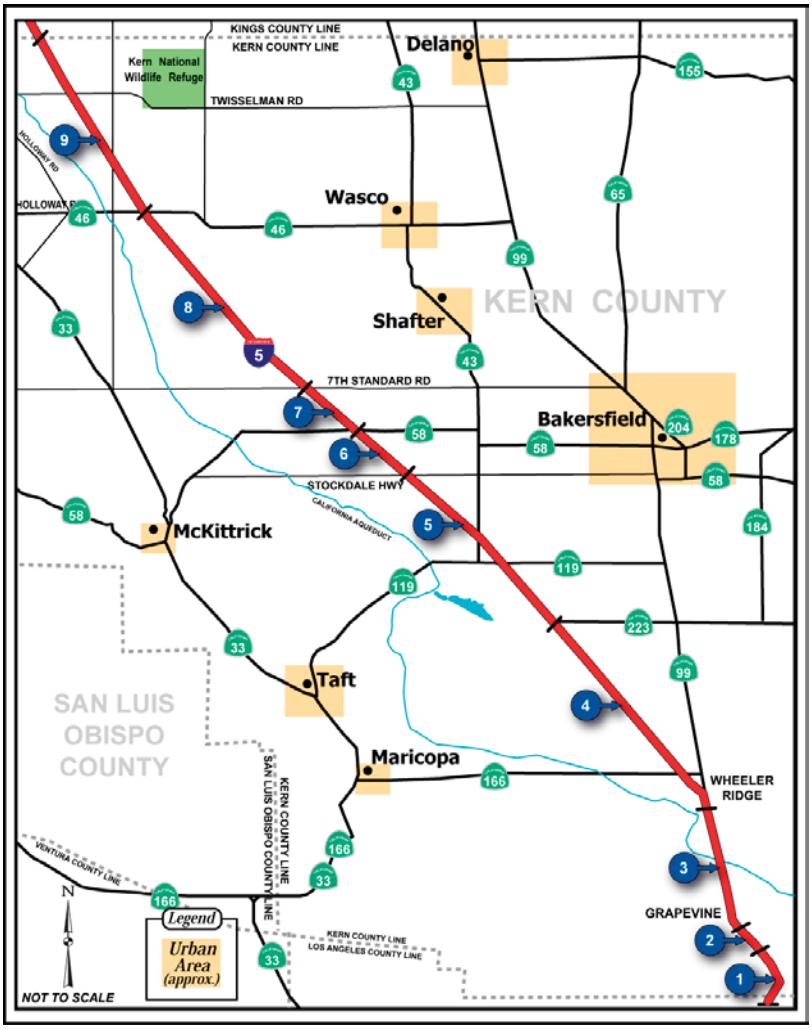
See the following page for the I-5 Segment Map.

IV. Geometrics, Land Use, and Environmental Considerations

Segments 1-9: Kern County: Los Angeles County Line to Kings County Line

Begins: At Los Angeles County Line, south of Gorman
Ends: 14 miles north of State Route 46, at the Kings County Line

Land Use: Interstate 5 is the main route between northern California, the great Central Valley, and Southern California. The highway descends from mountainous terrain through Grapevine Canyon, and passes historic Fort Tejon and the communities of Lebec, Grapevine, Wheeler Ridge, and Mettler. Near the community of Wheeler Ridge is the Tejon Industrial Complex, which is planned for 20 million square feet on 1,450 acres, and currently includes the over 1.7 million square foot IKEA warehouse. Amenities include the nearby Petro Travel Plaza and the TravelCenters of America facility.



The Bakersfield area is the sole major population center in the corridor. The land use is primarily agricultural and range land. Freeway commercial and residential uses are sparse, with the exception of a developed commercial area at the I-5/SR 58 interchange that serves the area residents and traveling public.

Facility: From the Los Angeles County line to the I-5/SR 99 Separation, the route consists of an 8-lane freeway facility. From that point through the balance of Kern County (and throughout Kings and Fresno Counties), the remainder of the route is a 4-lane freeway.
Interchanges with I-5 in this segment are with Routes 99, 166, 223, 119, 43, 58, and 46.

For the interstate traveler, there are two Safety Roadside Rest Areas (SRRAs) in Kern County. The Tejon Pass SRRA is located near Lebec. The Buttonwillow SRRA is located 2 miles north of the SR 58 interchange. The Safety Roadside Rest Area System Master Plan proposes a new South Dome rest area tentatively 35 miles north of the existing Buttonwillow SRRA.

Commonly known as the Grapevine, this northbound descent into the Central Valley involves steep grades.

Commonly known as the Grapevine, this northbound descent into the Central Valley involves steep grades from PM 0.0 near the summit to approximately PM 10.4 at the valley floor. On this descent there is a 6 percent grade for five miles, from approximately PM 4.8 to PM 9.8.

A dedicated truck lane (35-mile per hour speed limit) is available on the northbound descent to the valley floor which helps improve the traffic flow, as is a dedicated truck lane uphill in the southbound direction.

There are also two northbound truck escape ramps available for runaway trucks; one off the right shoulder at PM 8.2, the second in the median area at PM 8.6. The steep descent ends on the valley floor, near the commercial area of Grapevine.

Environmental/Historical Resources: With any future construction, environmental concerns in this 8-lane (8F) freeway from the Los Angeles County line to the I-5/SR 99 Separation would be related to the mountainous terrain, which would propose the greatest constraint to improvements of the Interstate.

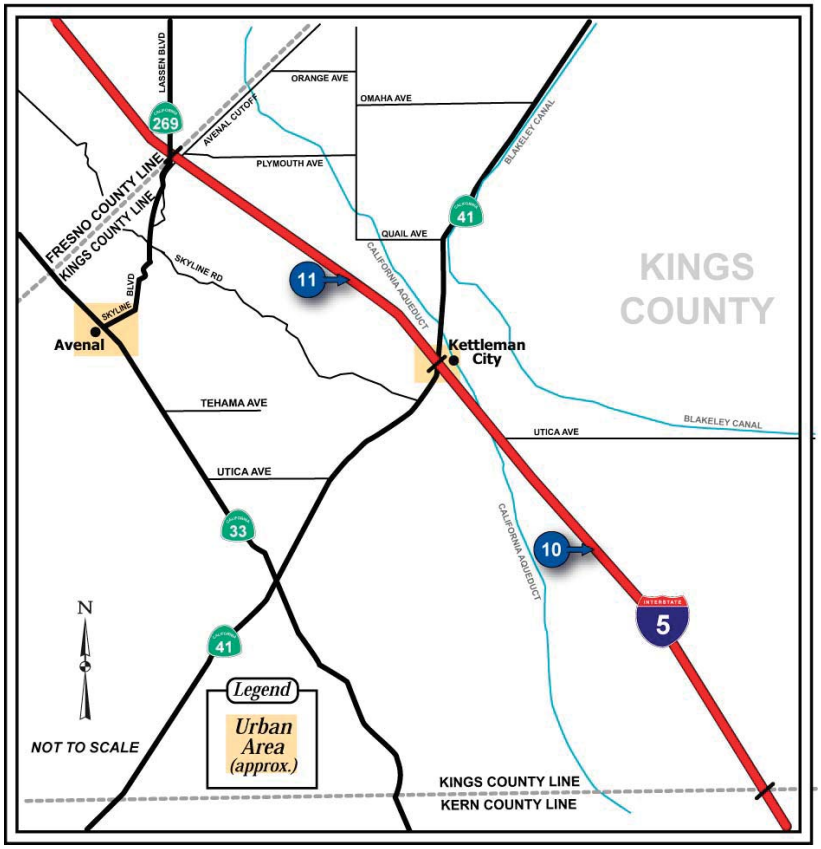
Other constraints include the presence of numerous utilities (such as crude oil pipelines and fiber optic cables), Grapevine Creek, Fort Tejon State Park and other historic properties, archaeology, endangered species, aesthetic concerns, the California Aqueduct, the two runaway truck escape ramps, and an occasionally split alignment along the route.

From the I-5/SR 99 Separation to the Kings County line, the route is a 4-lane freeway (4F), crossing the Kern River and several canals. In addition to these water crossing constraints, there are also historical issues. The median in this area appears to be wide enough to accommodate two additional lanes in each direction. Endangered species may forage or live within the river and canals and ROW, posing further potential environmental constraints. Construction of additional lanes could reduce the ability for wildlife to move across the freeway.

See the next page for infomation regarding Segments 10-11 and 12-16.

Segments 10-11: Kings County: Kern County Line to Fresno County Line

Begins: At the Kern County Line
Ends: At the junction of State Route 269/Fresno County Line



Land Use: Segments 10-11 consist of a 4-lane freeway traversing agricultural lands and the California Aqueduct. At the I-5/SR 41 Separation is Kettleman City, which offers motels, restaurants, convenience stores, and more.

Facility: The route is a 4-lane freeway throughout these segments. Interchanges with I-5 in this segment are with Routes 41 and 269.

Environmental/Historical Resources: Environmental issues include potential constraints from the California Aqueduct and several arroyos and creeks which cross the route. Endangered species may forage or live within the ROW. Construction of additional lanes could reduce the ability for wildlife to move across the freeway.

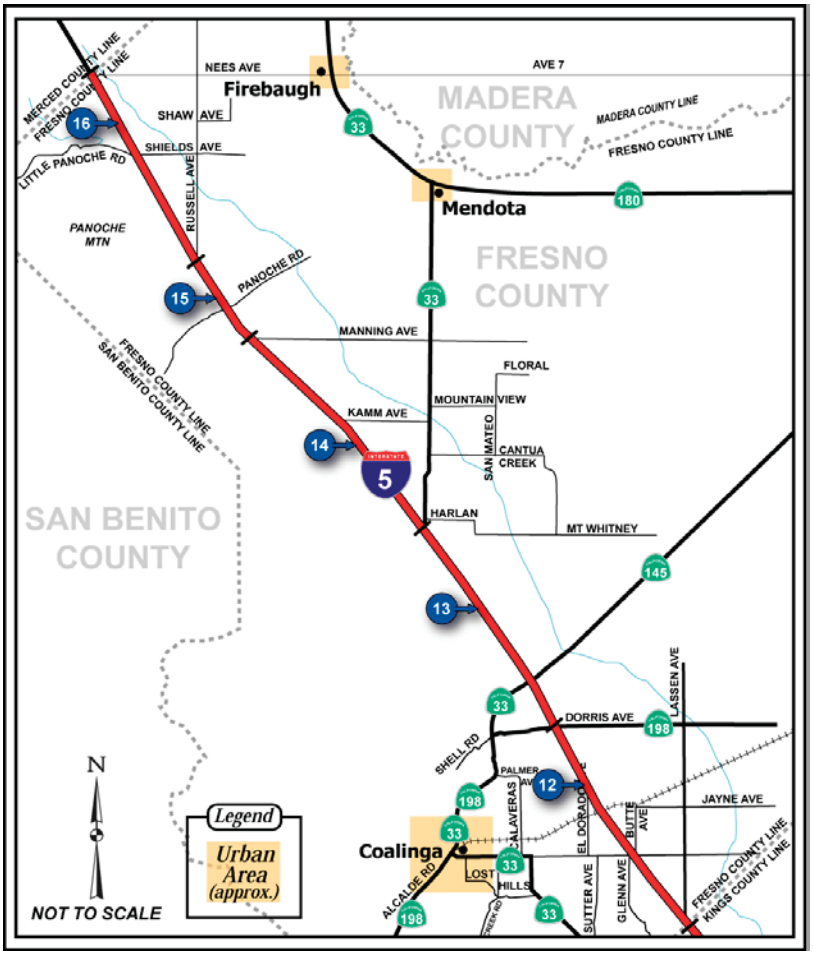
Segments 12-16: Fresno County: Kings County Line to Madera County Line

Begins: At the Kings County Line/State Route 269
Ends: At the Merced County Line, 0.4 miles north of the Nees Avenue Overcrossing

Land Use: Segments 12-16 consist of agricultural and range lands. For the traveler there is the Three Rocks roadside rest area at SR 33, the Harris Ranch commercial area southeast of I-5 and SR 198, and amenities at Panoche Road and Nees Avenue.

Facility: The route is a 4-lane freeway throughout these segments. Interchanges with I-5 in this segment are with Routes 269, 198, 145, and 33. For the traveler the Coalinga-Avenal SRRA is located 1.2 miles north of Lassen Avenue. The Safety Roadside Rest Area System Master Plan proposes the Three Rocks rest area, tentatively to be located 35 miles to the north of the existing Buttonwillow SRRA, near SR 33.

A Route Adoption Study that would explore the feasibility of connecting SR 180 to I-5 beginning at SR 33 in Fresno County has been proposed and funds have been allocated.



V. Concept Rationale

Route Concept LOS: Since I-5 is classified as entirely rural and because of the regional and statewide importance of this corridor for goods movement and interregional travel, LOS C has been assigned as the Route Concept.

Environmental/Historical Resources: Environmental issues for these final segments in District 6 include concerns with crossing the existing arroyos and creeks. Endangered species may forage or live within the ROW, posing potential constraints. Construction of additional lanes could reduce the ability for wildlife to move across the freeway.

Originally I-5 was designed for non-holiday traffic. Therefore, the traffic volume data used in projecting future volumes and for calculating levels of service in this TCR was compiled using non-holiday, weekend counts.

Concept Facility: The Concept Facility (corridor considered viable within 25 years) is as follows:

* Segment 1: add two lanes, from 8F to a 10-lane freeway (10F).
* Segment 2: add auxiliary lanes, from 6F+2AUX (truck lanes) to 8F+4AUX (truck lanes).
* Segment 3: add two lanes, from 8F to 10F.
* Segments 4-16: add two lanes, from 4F to 6F.

VI. Interstate 5 Transportation Concept Report Summary Chart

The following four page Summary Chart depicts the 16 distinct segments and provides descriptive and technical information, both current and forecast, for the Interstate. The Chart also has a linear geographic diagram that illustrates the major State and local highway facilities, along with key natural features, City/County boundaries, and current highway geometrics. A “Chart Explanation” bar defines what is shown on the Chart. The Summary Chart also delineates the functional classification, various highway designations, and general plan information.

See the following pages for the remainder of the TCR and the four page Summary Chart.

VII. A Review of Interstate 5 Performance: Current and Future

As of 2005, Interstate 5 is operating at LOS B and C throughout District 6. By 2015 and 2030, the LOS will likely deteriorate on all segments due to increased interregional and statewide travel. The route is projected to operate at LOS D, E, and F throughout District 6 by the year 2030 without improvements. However, with planned RTP and STIP capacity-increasing projects LOS improvements will be made throughout most of the route.

These projects, most of which will be an increase from 4F to 6F, will be sufficient to attain the Concept LOS of C in Segments 4-16. For Segments 1-3, the projected LOS with improvements (10F or 6F +2AUX lanes) will only be LOS E or F. Projected high truck volume in the Grapevine area necessitates adding these additional truck lanes. These improvements would help improve traffic flow and safety. Caltrans will monitor the need for capacity improvements on I-5 on a periodic basis.

Because of forecasted growth, proposals for the UTC include increasing the number of lanes from 4 to 8 lanes from the I-5/SR 99 Separation to the Fresno/Merced County line. The UTC proposes 10 lanes from the Los Angeles County line to the I-5/SR 99 Separation. For the future, there is the potential for a rail or transit corridor along I-5, in addition to the proposed High Speed Rail Corridor. It is unknown at this time what the effect High Speed Rail would have on relieving traffic congestion on Interstate 5, especially in the mountainous area.

The handling of truck traffic on Interstate 5 may be dealt with in unique ways to address the increasingly larger volumes in District 6. Caltrans District 7 in Los Angeles County is already studying alternatives for handling truck movements.

Numerous roadway improvements on I-5 have been identified through the Caltrans Intergovernmental Review (IGR) process. These identified improvements may occur as a result of local development impact on the State or Interstate highway. These have been conveyed to the local jurisdictions, including Kern, Kings, and Fresno Counties. Any projected improvements to I-5 will be funded in collaboration with the three Metropolitan Planning Organizations (MPOs) and Caltrans, as indicated in their respective Regional Transportation Plans (RTPs). The MPOs are the Kern Council of Governments, Kings County Association of Governments, and Council of Fresno County Governments.

There are also various State Highway Operations Protection Program (SHOPP) projects that focus on maintenance, safety, and operational improvements, such as median barrier construction and AC (asphaltic concrete) overlay.

In addition to these regular maintenance and periodic operations and safety improvements completed on Route 5 through SHOPP projects, Caltrans will continue to work toward ITS improvements as needed, and other strategies to more effectively provide traveler information and to improve traffic flow.

VIII. Planned and Programmed Capacity-Increasing Improvements to Interstate 5

The following table in this section shows both the planned and programmed *capacity-increasing* projects for Route 5 over the next 25 years. The table shows the segment, project, listing document, description, and projected completion date.

Note: only those segments with planned and/or programmed projects are listed.

Project scope and technical data are for general informational purposes only. If current information is needed, please verify with the Caltrans District 6 Office of Advance Planning at (559) 445-5232.

Segment PM From/To	I-5 Planned Projects	I-5 Programmed Projects
2 KERN PM 4.4-10.2 FT TEJON OC to GRAPEVINE UC	**RTP:** KER 5 PM 5.00–R14.5 Kern Co Line to Rte 5/99 SEP: *Widen from 8-lane freeway to 10-lane freeway (>2030).*	There are no capacity-improving projects currently programmed for this segment.
3 KERN PM 10.2-R15.5 GRAPEVINE UC to RTE 5/99 SEP	**RTP:** KER 5 PM 5.00–R14.5 Kern Co Line to Rte 5/99 SEP: *Widen from 8-lane freeway to 10-lane freeway (>2030).*	There are no capacity-improving projects currently programmed for this segment.
4 KERN PM R15.5-33.5 RTE 5/99 SEP to RTE 223/5 SEP	There are no capacity-improving projects currently planned for this segment.	**2006 STIP:** KER 5 PM 16.3–73.2 In Kern Co from Rte 99 to Rte 46: *Widen from 4 lane freeway to 6 lane freeway (PID phase).* *Begin construction: 2011/2012* *Complete construction: 2014/2015*
5 KERN PM 33.5-47.5 RTE 223/5 SEP to STOCKDALE RD OC	There are no capacity-improving projects currently planned for this segment.	**2006 STIP:** KER 5 PM 16.3–73.2 In Kern Co from Rte 99 to Rte 46: *Widen from 4 lane freeway to 6 lane freeway (PID phase).* *Begin construction: 2011/2012* *Complete construction: 2014/2015*
6 KERN PM 47.5-52.1 STOCKDALE RD OC to RTE 5/58 SEP	There are no capacity-improving projects currently planned for this segment.	**2006 STIP:** KER 5 PM 16.3–73.2 In Kern Co from Rte 99 to Rte 46: *Widen from 4 lane freeway to 6 lane freeway (PID phase).* *Begin construction: 2011/2012* *Complete construction: 2014/2015*
7 KERN PM 52.1-56.6 RTE 5/58 SEP to 7TH STANDARD RD	There are no capacity-improving projects currently planned for this segment.	**2006 STIP:** KER 5 PM 16.3–73.2 In Kern Co from Rte 99 to Rte 46: *Widen from 4 lane freeway to 6 lane freeway (PID phase).* *Begin construction: 2011/2012* *Complete construction: 2014/2015*
8 KERN PM 56.6-R73.0 7TH STANDARD RD to RTE 46/5 SEP	There are no capacity-improving projects currently planned for this segment.	**2006 STIP:** KER 5 PM 16.3–73.2 In Kern Co from Rte 99 to Rte 46: *Widen from 4 lane freeway to 6 lane freeway (PID phase).* *Begin construction: 2011/2012* *Complete construction: 2014/2015*

Project scope and technical data are for general informational purposes only. If current information is needed, please verify with the Caltrans District 6 Office of Advance Planning at (559) 445-5232.		
Segment PM From/To	**I-5 Planned Projects**	**I-5 Programmed Projects**
10 KINGS PM R0.0-16.6 KERN/KINGS CO LINE to RTE 5/41 SEP	**RTP:** KIN 5 PM 0.0–26.7 Kern Co Line to Fresno Co Line: *Widen from 4-lane freeway to 6-lane freeway (>2025).*	There are no capacity-improving projects currently programmed for this segment.
11 KINGS PM 16.6-26.7 RTE 5/41 SEP to KINGS/FRESNO CO LINE	**RTP:** KIN 5 PM 0.0–26.7 Kern Co Line to Fresno Co Line: *Widen from 4-lane freeway to 6-lane freeway (>2025).*	There are no capacity-improving projects currently programmed for this segment.
12 FRESNO PM 0.0-14.9 KINGS/FRESNO CO LINE to RTE 198/5 SEP	**RTP:** FRE 5 PM 0.0–66.2 Kings Co Line to Merced Co Line: *Widen from 4-lane freeway to 6-lane freeway (Future).*	There are no capacity-improving projects currently programmed for this segment.
13 FRESNO PM 14.9-30.0 RTE 198/5 SEP to N JCT RTE 33/5 SEP	**RTP:** FRE 5 PM 0.0–66.2 Kings Co Line to Merced Co Line: *Widen from 4-lane freeway to 6-lane freeway (Future).*	There are no capacity-improving projects currently programmed for this segment.
14 FRESNO PM 30.0-45.8 N JCT RTE 33/5 SEP to MANNING AVE OC	**RTP:** FRE 5 PM 0.0–66.2 Kings Co Line to Merced Co Line: *Widen from 4-lane freeway to 6-lane freeway (Future).*	There are no capacity-improving projects currently programmed for this segment.
15 FRESNO PM 45.8-52.7 MANNING AVE OC to RUSSELL AVE OC	**RTP:** FRE 5 PM 0.0–66.2 Kings Co Line to Merced Co Line: *Widen from 4-lane freeway to 6-lane freeway (Future).*	There are no capacity-improving projects currently programmed for this segment.
16 FRESNO PM 52.7-66.2 RUSSELL AVE OC to MERCED CO LINE	**RTP:** FRE 5 PM 0.0–66.2 Kings Co Line to Merced Co Line: *Widen from 4-lane freeway to 6-lane freeway (Future).*	There are no capacity-improving projects currently programmed for this segment.

See the Appendix for References, Glossary, and additional information on Intelligent Information Services, Transit, and Bicycle Facilities.